these laboratory findings can be accepted only with reservations.

Very recently an allegedly new specific local fungicidal drug, phenylmercuric nitrate, was offered as possessing a superior therapeutic value in tineas.[2] But my personal experience in a limited series of cases does not bear out the superior results claimed for it.

In my opinion, the clinical control of epidermophytosis cannot be obtained by local measures alone, in spite of the best technique, neither with fungicidal applications nor with actinotherapy, x-ray included. The systemic attention in the way of increasing the resistance of individual to mycotic infection should be supplemented. It can be attempted along immunologic lines, with injections of trichophytin in gradually increasing dosage.[3]

The results with the present status of technique are not conclusive. Furthermore, the procedure requires considerable competence and caution, as otherwise serious toxic reactions and damage may result. It seems, however, that the best results may be obtained ultimately from the attempts in this direction.

I believe, also, that other systemic correlated factors should be looked after, such as diet, particularly in regard to sugar reduction, and also hyperidrosis, palmar, plantar and axillar and inguinal, as these play a considerable part as a predisposing factor to fungus infection. The hygienic measures of individual and social nature should be integrated as an important link in the chain of the therapeutic measures of the clinical control of epidermophytosis.

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THE PHYSICIAN HIMSELF

I

On the occasion of a recent large medical gathering, the program consisted of a single address on "Medical Caricatures." And most entertaining it proved, too. But certain reflections, inspired by the subject and its presentation, seem much more serious than entertaining.

Why should medicine and the medical man so commonly be regarded as legitimate targets for the would-be-funny cartoonist and caricaturist? Is the explanation to be sought in the profession or in the individual physician? Undoubtedly the latter is the case, because the profession is judged solely by the members who compose it. The faults and foibles so often the themes of ridicule in lay publications, plays, and "movies," are practically always personified in some "Doc," or "Dr. Quack."

The individual physician—is he all that he might be for the furtherance of his own best interests, and for the dignity and public repute of his calling? What manner of man is the modern physician? The outstanding human value is character. Does he measure up from this viewpoint?

When the scientist investigates inanimate nature he reaches conclusions which may be expressed only in imponderable terms and symbols. Likewise, when animate nature is analyzed, the ultimate phenomena of life and conduct are found to consist of elements and combinations of elements to which fanciful terms must be assigned. One of these terms is character. It is scarcely possible to segregate and define the subtle factors which enter into the concept of character, but everyone knows what they mean.

Integrity, conscience, morality, discretion, sobriety, charity, high purpose—not arrogance, conceit, greed, "four-flushing"—are some of the qualities the individual physician must manifest if the profession is to be protected from the ill-considered, often venomous, attacks of the caricaturist. Humor, real humor, is not objectionable when its intent is to evoke a healthy smile or teach a wholesome lesson. And in fairness it must be admitted that the thrusts of paragrapher and cartoonist do occasionally appear to spring from kindly motives.

In our capacity simply as men and women we may smile, or even guffaw, at the sallies, sometimes clever, sometimes merely coarse, of the caricaturist. But in our hearts we realize that they hurt, and that our profession should be beyond the possibility of such odious derision.

For long years the medical profession has been on the defensive. Acting through organizations it seems wholly unable to attain and maintain its rightful place in the confidence of the general public. "Education of the people," the idealistic slogan so long extolled as a panacea, seems impotent to meet the insidious propaganda of the designing and the vicious.

The issue is with the physician himself—his character and the impression he makes in his personal contacts. Nobility of character on the part of each member-unit is the only means by which the profession, as a whole, may hope to enjoy a position invulnerable to the shafts of ridicule, satire, and malice.

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SCARRING IN ACNE

Scarring, which becomes apparent after the cure of a case of acne, has been a question before the minds of physicians for many years. We are all familiar with the immense amount of damage done to the skin by severe cases, but we are often presented with the decision as to whether or not the scarring has been increased by x-ray therapy, or whether it has been decreased or not modified through this agency. The appearance of the scarring at the end of treatment has been the basis for many lawsuits which have been directed toward the innocent physician because the patients are dissatisfied with the appearance of their skin, and refuse to accept the fact that the scarring must necessarily be the result of the disease. The lack of understanding of this fact by a lay jury has often been the cause of an adverse decision directed toward the physician. The patient finds the scars to be apparent after the disease has

2 Levine, B.: A. M. A. A., 101:2109, 1933.
3 Wise and Sultzberger, J. A. M. A., November 19, 1922.

healed and the inflammation has left the skin. Their attention has been so thoroughly centered on the swelling and pustulation of the disease that they have given no consideration to the fact that scars are being formed. These scars become noticeable after the swelling has gone. The physician and the x-ray treatment are blamed for this unfortunate condition.

Dr. Henry D. Niles of New York has published an article in the January, 1933, *Archives of Dermatology and Syphilology* in which he gives the record of forty cases which he treated in a manner to compare the effect of x-ray in the production of scarring with other methods of treatment of various types of acne. The summary of this article is as follows:

1. In forty patients who were given an average of twelve and one-half weekly exposures of one-fourth skin unit of roentgen rays on one side of the face, and a placebo treatment on the other, the scars were equal on both sides in thirty-two cases, more pronounced on the untreated side in five, and greater on the treated side in three.

2. The amount of scarring after acne vulgaris depends on the severity and duration of the eruption and the tendency of the patient's skin toward scar formation. This seems to be neither increased nor decreased by roentgen therapy.

3. In nineteen of the forty patients, the untreated side was either entirely cured or almost well, and as much improved as the treated side. Several theories as to the possible explanation of this unexpected finding are given.

The above series naturally will have to be added to considerably before we can make a proper statistical survey; however, they do definitely prove that we are certainly not damaging our patients through the use of proper x-ray therapy, and that it is probably preferable to other types of treatment in cases in which the damage to the skin is relatively severe.

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SALT SUBSTITUTION THERAPY IN ADDISON'S DISEASE

It has been demonstrated experimentally that a loss of sodium and chlorin particularly, as well as a negative balance for calcium, magnesium, potassium, phosphorus and nitrogen occurs in adrenalectomized animals.[1] Because of the loss of these basic elements, Rubin and Krick directed their treatment toward replacing them; and the improvement which followed was striking: untreated controls died in ten days, whereas rats receiving the salt mixture survived in apparent health for four months. These investigators believe it is probable that the action of the adrenal cortical hormone is primarily one of salt regulation. It is known, further, that sodium excretion is augmented in adrenalectomized animals.[2]

Loeb and co-workers [2] have observed a decrease in the sodium concentration of the blood serum in Addison's disease patients, and by diminishing the salt intake they have promptly induced symptoms of adrenal insufficiency. Administration of large amounts of sodium chlorid, on the other hand, brings about marked clinical improvement, which parallels the sodium level of the blood serum. Harrop et al.,[3] and Rogoff [4] appreciate this also, since Harrop suggested the use of a salt-free diet as a diagnostic measure. Rogoff has noted a "spectacular resuscitation from coma by intravenous saline solutions."

Our experience in maintaining an Addison's disease patient in apparent health, with sodium chlorid substitution therapy alone, confirms these observations. In this instance, the cost of cortical extract was excessive for this individual, so salt was prescribed. Eschatin had been given in recommended amounts over a four weeks' period, with some improvement, but the patient was not able to leave her bed. A salt-poor diet for a ten-day period aggravated the typical symptoms of Addison's disease. Blood (plasma) sodium chlorid was 508 milligram per cent before treatment (normal range 570 to 620 milligram per cent). Ten grams of table salt were given orally daily and eschatin was discontinued. Within ten days the patient was up daily, and in two weeks after onset of therapy she was able to care for herself entirely. She has since been well, except for ankle swelling which occurs when her blood salt level exceeds the normal range. Over a four months' period the blood (plasma) sodium chlorid content has ranged from 564 to 653 milligram per cent.

In our opinion, salt substitution therapy should be used in maintaining the normal level of sodium chlorid, as well as other elements found to be deficient in these individuals. It is probable also that the administration of sodium chlorid exerts some sparing action on other mineral metabolism. Since but approximately 10 per cent of the normal amount of adrenal cortical tissue is needed for life, and since glandular therapy is expensive and not entirely satisfactory when used alone, more attention should be paid to salt metabolism in Addison's disease. Increases in blood non-protein and urea nitrogen have been taken to indicate abnormal trends in adrenalectomized dogs.[5] These tests might be used clinically, together with sodium chlorid determinations as guides for ascertaining whether salt substitution or glandular therapy is indicated.*

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* With technical assistance of Miss T. Blumberg.